

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US2004/019489

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 · C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, EMBL, WPI Data, Sequence Search, BIOSIS

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 01/18050 A (HOON MARK ; MUELLER KEN (US); RYBA NICK (US); US HEALTH (US); UNIV CAL) 15 March 2001 (2001-03-15)	1, 17, 18
Y A	*Sequences 1 and 2, Sequences 19, 20* & LIPSHUTZ R J ET AL: "High density synthetic oligonucleotide arrays" NATURE GENETICS, NEW YORK, NY, US, vol. 21, January 1999 (1999-01), pages 20-24, XP002182912 ISSN: 1061-4036	2-5, 8-49 2
X	----- DATABASE DBSNP 19 July 2001 (2001-07-19), GENAISSANCE: "ss3181754" XP002302158 retrieved from NCNI	6, 7, 19, 20, 23
Y	Database accession no. RS2234233 the whole document -/-	8-49

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

25 February 2005

Date of mailing of the international search report

21. 03. 2005

Name and mailing address of the ISA

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## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☒ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:  
1-49 with respect to inventions 1,8,11,16,17 and 21
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 8, 9, 15 (completely) and 6,7,  
10-14,16,18-33,37,38,45-49 (partially)

a collection of T2R variant nucleic acids, comprising at least 2 T2R1 variant specific nucleic acid molecules which comprise at least one SNP listed in Table 7, an array comprising said collection, an isolated polypeptide fragment comprising an amino acid change as in Figure 1 or Table 7, an isolated nucleic acid molecule, a kit comprising a T2R1 isoform specific antibody, and a method to screen for compounds useful for modulating bitter taste.

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2. claims: 4-5, 8, 9, 15 (completely) and 1-3, 6, 7, 10-14, 16-49 (partially)

A T2R3 variant specific nucleic acid molecule comprising at least one SNP, a collection of T2R variant nucleic acids, comprising at least 2 T2R3 variant specific nucleic acid molecules which comprise at least one SNP listed in Table 7, an array comprising said collection, an isolated polypeptide fragment comprising an amino acid change as in Figure 1 or Table 7, an isolated nucleic acid molecule, a kit comprising a T2R3 isoform specific antibody, and a method to screen for compounds useful for modulating bitter taste.

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3. claims: 8, 9, 15 (completely) and 6,7,  
10-14,16,18-33,37,38,45-49 (partially)

a collection of T2R variant nucleic acids, comprising at least 2 T2R4 variant specific nucleic acid molecules which comprise at least one SNP listed in Table 7, an array comprising said collection, an isolated polypeptide fragment comprising an amino acid change as in Figure 1 or Table 7, an isolated nucleic acid molecule, a kit comprising a T2R4 isoform specific antibody, and a method to screen for compounds useful for modulating bitter taste.

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4. claims: 4-5, 8, 9, 15 (completely) and 1-3, 6, 7, 10-14, 16-49 (partially)

A T2R5 variant specific nucleic acid molecule comprising at least one SNP, a collection of T2R variant nucleic acids, comprising at least 2 T2R5 variant specific nucleic acid molecules which comprise at least one SNP listed in Table 7, an array comprising said collection, an isolated polypeptide fragment comprising an amino acid change as in Figure 1 or Table 7, an isolated nucleic acid molecule, a kit comprising a T2R5 isoform specific antibody, and a method to screen for compounds useful for modulating bitter taste.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

5. claims: 8, 9, 15 (completely) and 6,7,  
10-14,16,18-33,37,38,45-49 (partially)

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a collection of T2R variant nucleic acids, comprising at least 2 T2R7 variant specific nucleic acid molecules which comprise at least one SNP listed in Table 7, an array comprising said collection, an isolated polypeptide fragment comprising an amino acid change as in Figure 1 or Table 7, an isolated nucleic acid molecule, a kit comprising a T2R7 isoform specific antibody, and a method to screen for compounds useful for modulating bitter taste.  
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6. claims: 4-5, 8, 9, 15 (completely) and 1-3, 6, 7, 10-14, 16-49  
(partially)

A T2R8 variant specific nucleic acid molecule comprising at least one SNP, a collection of T2R variant nucleic acids, comprising at least 2 T2R8 variant specific nucleic acid molecules which comprise at least one SNP listed in Table 7, an array comprising said collection, an isolated polypeptide fragment comprising an amino acid change as in Figure 1 or Table 7, an isolated nucleic acid molecule, a kit comprising a T2R8 isoform specific antibody, and a method to screen for compounds useful for modulating bitter taste.  
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7. claims: 4-5, 8, 9, 15 (completely) and 1-3, 6, 7, 10-14, 16-49  
(partially)

A T2R9 variant specific nucleic acid molecule comprising at least one SNP, a collection of T2R variant nucleic acids, comprising at least 2 T2R9 variant specific nucleic acid molecules which comprise at least one SNP listed in Table 7, an array comprising said collection, an isolated polypeptide fragment comprising an amino acid change as in Figure 1 or Table 7, an isolated nucleic acid molecule, a kit comprising a T2R9 isoform specific antibody, and a method to screen for compounds useful for modulating bitter taste.  
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8. claims: 4-5, 8, 9, 15 (completely) and 1-3, 6, 7, 10-14, 16-49  
(partially)

A T2R10 variant specific nucleic acid molecule comprising at least one SNP, a collection of T2R variant nucleic acids, comprising at least 2 T2R10 variant specific nucleic acid molecules which comprise at least one SNP listed in Table 7, an array comprising said collection, an isolated polypeptide fragment comprising an amino acid change as in Figure 1 or Table 7, an isolated nucleic acid molecule, a kit comprising a T2R10 isoform specific antibody, and a method to screen for compounds useful for modulating bitter taste.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

9. claims: 8, 9, 15 (completely) and 6,7,  
10-14,16,18-33,37,38,45-49 (partially)

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a collection of T2R variant nucleic acids, comprising at least 2 T2R13 variant specific nucleic acid molecules which comprise at least one SNP listed in Table 7, an array comprising said collection, an isolated polypeptide fragment comprising an amino acid change as in Figure 1 or Table 7, an isolated nucleic acid molecule, a kit comprising a T2R13 isoform specific antibody, and a method to screen for compounds useful for modulating bitter taste.  
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10. claims: 4-5, 8, 9, 15 (completely) and 1-3, 6, 7, 10-14, 16-49  
(partially)

A T2R14 variant specific nucleic acid molecule comprising at least one SNP, a collection of T2R variant nucleic acids, comprising at least 2 T2R14 variant specific nucleic acid molecules which comprise at least one SNP listed in Table 7, an array comprising said collection, an isolated polypeptide fragment comprising an amino acid change as in Figure 1 or Table 7, an isolated nucleic acid molecule, a kit comprising a T2R14 isoform specific antibody, and a method to screen for compounds useful for modulating bitter taste.  
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11. claims: 4-5, 8, 9, 15 (completely) and 1-3, 6, 7, 10-14, 16-49  
(partially)

A T2R16 variant specific nucleic acid molecule comprising at least one SNP, a collection of T2R variant nucleic acids, comprising at least 2 T2R16 variant specific nucleic acid molecules which comprise at least one SNP listed in Table 7, an array comprising said collection, an isolated polypeptide fragment comprising an amino acid change as in Figure 1 or Table 7, an isolated nucleic acid molecule, a kit comprising a T2R16 isoform specific antibody, and a method to screen for compounds useful for modulating bitter taste.  
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12. claims: 4-5, 8, 9, 15 (completely) and 1-3, 6, 7, 10-14, 16-49  
(partially)

A T2R38 variant specific nucleic acid molecule comprising at least one SNP, a collection of T2R variant nucleic acids, comprising at least 2 T2R38 variant specific nucleic acid molecules which comprise at least one SNP listed in Table 7, an array comprising said collection, an isolated polypeptide fragment comprising an amino acid change as in Figure 1 or Table 7, an isolated nucleic acid molecule, a kit comprising a T2R38 isoform specific antibody, and a method to screen for compounds useful for modulating bitter taste.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

13. claims: 4-5, 8, 9, 15 (completely) and 1-3, 6, 7, 10-14, 16-49 (partially)

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A T2R39 variant specific nucleic acid molecule comprising at least one SNP, a collection of T2R variant nucleic acids, comprising at least 2 T2R39 variant specific nucleic acid molecules which comprise at least one SNP listed in Table 7, an array comprising said collection, an isolated polypeptide fragment comprising an amino acid change as in Figure 1 or Table 7, an isolated nucleic acid molecule, a kit comprising a T2R39 isoform specific antibody, and a method to screen for compounds useful for modulating bitter taste.  
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14. claims: 4-5, 8, 9, 15 (completely) and 1-3, 6, 7, 10-14, 16-49 (partially)

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A T2R40 variant specific nucleic acid molecule comprising at least one SNP, a collection of T2R variant nucleic acids, comprising at least 2 T2R40 variant specific nucleic acid molecules which comprise at least one SNP listed in Table 7, an array comprising said collection, an isolated polypeptide fragment comprising an amino acid change as in Figure 1 or Table 7, an isolated nucleic acid molecule, a kit comprising a T2R40 isoform specific antibody, and a method to screen for compounds useful for modulating bitter taste.  
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15. claims: 4-5, 8, 9, 15 (completely) and 1-3, 6, 7, 10-14, 16-49 (partially)

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A T2R41 variant specific nucleic acid molecule comprising at least one SNP, a collection of T2R variant nucleic acids, comprising at least 2 T2R41 variant specific nucleic acid molecules which comprise at least one SNP listed in Table 7, an array comprising said collection, an isolated polypeptide fragment comprising an amino acid change as in Figure 1 or Table 7, an isolated nucleic acid molecule, a kit comprising a T2R41 isoform specific antibody, and a method to screen for compounds useful for modulating bitter taste.  
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16. claims: 4-5 (completely) and 1-3, 17, 18, 34-36, 39-44, 47-49 (partially)

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A T2R43 variant specific nucleic acid molecule comprising at least one SNP, an array comprising at least 2 such molecules, an isolated polypeptide fragment comprising an amino acid change as in Figure 1, and a method to screen for compounds useful for modulating bitter taste.  
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17. claims: 4-5, 8, 9, 15 (completely) and 1-3, 6, 7, 10-14, 16-49

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

(partially)

A T2R44 variant specific nucleic acid molecule comprising at least one SNP, a collection of T2R variant nucleic acids, comprising at least 2 T2R44 variant specific nucleic acid molecules which comprise at least one SNP listed in Table 7, an array comprising said collection, an isolated polypeptide fragment comprising an amino acid change as in Figure 1 or Table 7, an isolated nucleic acid molecule, a kit comprising a T2R44 isoform specific antibody, and a method to screen for compounds useful for modulating bitter taste.

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18. claims: 4-5, 8, 9, 15 (completely) and 1-3, 6, 7, 10-14, 16-49 (partially)

A T2R46 variant specific nucleic acid molecule comprising at least one SNP, a collection of T2R variant nucleic acids, comprising at least 2 T2R46 variant specific nucleic acid molecules which comprise at least one SNP listed in Table 7, an array comprising said collection, an isolated polypeptide fragment comprising an amino acid change as in Figure 1 or Table 7, an isolated nucleic acid molecule, a kit comprising a T2R46 isoform specific antibody, and a method to screen for compounds useful for modulating bitter taste.

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19. claims: 4-5, 8, 9, 15 (completely) and 1-3, 6, 7, 10-14, 16-49 (partially)

A T2R47 variant specific nucleic acid molecule comprising at least one SNP, a collection of T2R variant nucleic acids, comprising at least 2 T2R47 variant specific nucleic acid molecules which comprise at least one SNP listed in Table 7, an array comprising said collection, an isolated polypeptide fragment comprising an amino acid change as in Figure 1 or Table 7, an isolated nucleic acid molecule, a kit comprising a T2R47 isoform specific antibody, and a method to screen for compounds useful for modulating bitter taste.

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20. claims: 4-5, 8, 9, 15 (completely) and 1-3, 6, 7, 10-14, 16-49 (partially)

A T2R48 variant specific nucleic acid molecule comprising at least one SNP, a collection of T2R variant nucleic acids, comprising at least 2 T2R48 variant specific nucleic acid molecules which comprise at least one SNP listed in Table 7, an array comprising said collection, an isolated polypeptide fragment comprising an amino acid change as in Figure 1 or Table 7, an isolated nucleic acid molecule, a kit comprising a T2R48 isoform specific antibody, and a method to screen for compounds useful for modulating bitter taste.

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## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

21. claims: 4-5, 8, 9, 15 (completely) and 1-3, 6, 7, 10-14, 16-49 (partially)

A T2R49 variant specific nucleic acid molecule comprising at least one SNP, a collection of T2R variant nucleic acids, comprising at least 2 T2R49 variant specific nucleic acid molecules which comprise at least one SNP listed in Table 7, an array comprising said collection, an isolated polypeptide fragment comprising an amino acid change as in Figure 1 or Table 7, an isolated nucleic acid molecule, a kit comprising a T2R49 isoform specific antibody, and a method to screen for compounds useful for modulating bitter taste.

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22. claims: 8, 9, 15 (completely) and 6,7, 10-14,16,18-33,37,38,45-49 (partially)

a collection of T2R variant nucleic acids, comprising at least 2 T2R50 variant specific nucleic acid molecules which comprise at least one SNP listed in Table 7, an array comprising said collection, an isolated polypeptide fragment comprising an amino acid change as in Figure 1 or Table 7, an isolated nucleic acid molecule, a kit comprising a T2R50 isoform specific antibody, and a method to screen for compounds useful for modulating bitter taste.

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23. claims: 4-5, 8, 9, 15 (completely) and 1-3, 6, 7, 10-14, 16-49 (partially)

A T2R60 variant specific nucleic acid molecule comprising at least one SNP, a collection of T2R variant nucleic acids, comprising at least 2 T2R60 variant specific nucleic acid molecules which comprise at least one SNP listed in Table 7, an array comprising said collection, an isolated polypeptide fragment comprising an amino acid change as in Figure 1 or Table 7, an isolated nucleic acid molecule, a kit comprising a T2R60 isoform specific antibody, and a method to screen for compounds useful for modulating bitter taste.

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
	<p>&amp; DATABASE DBSNP 2 January 2001 (2001-01-02), TSC-CSHL: "submitted SNP details" retrieved from NCBI Database accession no. SS2718533 the whole document</p> <p>-----</p>	
X	<p>DATABASE DBSNP 2 January 2001 (2001-01-02), TSC-CSHL: "ss2718533" XP002302159 retrieved from NCBI Database accession no. RS41469 the whole document</p>	6,7
Y		8-33,37, 38,45-49
Y	<p>-----</p> <p>KIM UN-KYUNG ET AL: "Positional cloning of the human quantitative trait locus underlying taste sensitivity to phenylthiocarbamide." SCIENCE. 21 FEB 2003, vol. 299, no. 5610, 21 February 2003 (2003-02-21), pages 1221-1225, XP002301614 ISSN: 1095-9203 cited in the application the whole document</p> <p>-----</p>	8-16, 26-49
X	<p>WO 01/77676 A (SENOYX INC) 18 October 2001 (2001-10-18) the whole document</p> <p>-----</p>	1,17,18, 34 26-49
Y		
X	<p>DATABASE DBSNP 27 July 2000 (2000-07-27), "refSNP ID: rs597468" XP002317831 retrieved from NCBI Database accession no. RS597468 cited in the application abstract</p> <p>-----</p>	6,7
Y		2-5
X	<p>DATABASE Geneseq 'Online! 18 July 2001 (2001-07-18), "Human secreted protein-encoding gene 8 cDNA clone HBBBC71, SEQ ID NO:18." XP002317832 retrieved from EBI accession no. GSN:AAD05499 Database accession no. AAD05499 the whole document</p> <p>-----</p>	1,20,23
Y		26-49
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## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US2004/019489

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DATABASE DBSNP C/G SNP at AA 101 of T2R16 25 September 2001 (2001-09-25), "rs2692396" XP002317833 retrieved from NCBI Database accession no. RS2692396 cited in the application abstract	1,6,7
X	----- DATABASE DBSNP 19 July 2001 (2001-07-19), "rs2233988" XP002317834 retrieved from NCBI Database accession no. RS2233988 cited in the application abstract	1,6,7,23
Y		2-5
X	----- DATABASE DBSNP 19 July 2001 (2001-07-19), XP002317835 retrieved from NCBI Database accession no. RS2233989 cited in the application abstract	6,7
X	----- DATABASE DBSNP 2 September 2000 (2000-09-02), XP002317836 retrieved from NCBI Database accession no. RS846664 cited in the application abstract	6,7
X	----- DATABASE DBSNP 2 September 2000 (2000-09-02), XP002317837 retrieved from NCBI Database accession no. RS860170 cited in the application abstract	6,7
X	----- DATABASE DBSNP 5 October 2000 (2000-10-05), XP002317838 retrieved from NCBI Database accession no. RS1204014 cited in the application abstract	6,7
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Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Form PCT/ISA/210 (continuation of second sheet) (January 2004)

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US2004/019489

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 03/006482 A (SENOYX, INC; PRONIN, ALEXEY; CONNOR, JUDY; TANG, HUIXIAN; KEUNG, WALT) 23 January 2003 (2003-01-23) *seq id 9*	1,17,18, 34
A	----- SHI PENG ET AL: "Adaptive diversification of bitter taste receptor genes in Mammalian evolution." MOLECULAR BIOLOGY AND EVOLUTION. MAY 2003, vol. 20, no. 5, May 2003 (2003-05), pages 805-814, XP002302157 ISSN: 0737-4038 cited in the application table 1	1-49
A	----- UEDA T ET AL: "Identification of coding single-nucleotide polymorphisms in human taste receptor genes involving bitter tasting." BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS. 6 JUL 2001, vol. 285, no. 1, 6 July 2001 (2001-07-06), pages 147-151, XP002301613 ISSN: 0006-291X the whole document	1-49
A	----- WO 03/008627 A (DRAYNA DENNIS ; US GOVERNMENT (US); KIM UN-KYUNG (US); LEPPERT MARK (U) 30 January 2003 (2003-01-30) the whole document	6-49
P,X	----- WO 2004/029087 A (MEYERHOF WOLFGANG ; BUFE BERND (DE); HOFMANN THOMAS (DE); KUHN CHRISTI) 8 April 2004 (2004-04-08) the whole document -----	1-49

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0118050	A	15-03-2001	US 2002051997 A1	02-05-2002
			US 2003022278 A1	30-01-2003
			AU 773600 B2	27-05-2004
			AU 7366400 A	10-04-2001
			CA 2384777 A1	15-03-2001
			CN 1387536 T	25-12-2002
			EP 1214343 A2	19-06-2002
			JP 2003510037 T	18-03-2003
			NO 20021164 A	10-05-2002
			WO 0118050 A2	15-03-2001
			US 2004038312 A1	26-02-2004
			US 2003157568 A1	21-08-2003
WO 0177676	A	18-10-2001	AU 5125801 A	23-10-2001
			CA 2403003 A1	18-10-2001
			CN 1434921 T	06-08-2003
			DE 01924619 T1	15-04-2004
			EP 1292827 A1	19-03-2003
			JP 2003530098 T	14-10-2003
			NO 20024809 A	09-12-2002
			WO 0177676 A1	18-10-2001
			US 2004209313 A1	21-10-2004
			US 2002094551 A1	18-07-2002
WO 03006482	A	23-01-2003	CA 2452337 A1	23-01-2003
			EP 1502112 A2	02-02-2005
			WO 03006482 A2	23-01-2003
			US 2003170608 A1	11-09-2003
WO 03008627	A	30-01-2003	CA 2454566 A1	30-01-2003
			WO 03008627 A2	30-01-2003
			US 2004248123 A1	09-12-2004
WO 2004029087	A	08-04-2004	WO 2004029087 A2	08-04-2004